

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-6. (Canceled).

7. (Currently Amended) A method of data processing using a processor comprising a reconfigurable field of data processing cells and a register, wherein the register has a data stream memory designed as a vector memory to store at least one of a data stream and parts of the data stream, the method comprising:

providing a program corresponding to a sequence of compilable high-level language instructions ~~to the processor for execution of the program;~~

determining, for the reconfigurable field of data processing cells, a ~~configuration~~ set of configurations ~~corresponding to the program and by execution running~~ of which the program is ~~executed run~~, wherein each of the configuration set including a sequence of configurations is handled as a single instruction;

determining, for each configuration, a respective maximum allowed execution runtime prior to lapse of which the respective configuration is uninterruptible;

executing the ~~sequence of~~ configurations; and

during the executing:

storing, in the data stream memory, at least one of the data stream and parts of the data stream; and

for each configuration, monitoring the respective maximum allowed execution runtime in order to interrupt the configuration if the respective maximum allowed execution runtime is exceeded.

8. (Previously Presented) The method as recited in claim 7, further comprising:

using at least one of: i) a register allocation device to allocate the register, and ii) a register releasing device to release the register.

9. (Previously Presented) The method as recited in claim 8, wherein the register allocation device is preserved over multiple reconfigurations of the reconfigurable field of data processing cells.

10. (Previously Presented) The method as recited in claim 7, wherein the register is a RAM PAE.

11. (Previously Presented) The method as recited in claim 7, wherein the program includes a multitask application, the method further comprising:

using the register:

to provide read and write access when a virtual FIFO dividing line is implemented; and

for execution of at least one of two different tasks of the multitask application.

12. (Previously Presented) The method as recited in claim 7, further comprising:
using at least one memory unit as a stack and to indicate at least one of a stack underflow state and a stack overflow state.

13. (Previously Presented) The method as recited in claim 12, wherein the at least one of the underflow state and overflow state is of an operating system unit.

14. (Canceled).

15. (Previously Presented) The method as recited in claim 7, wherein a watchdog is used to recognize an exceedance of each respective maximum allowed execution runtime.

16. (Previously Presented) The method as recited in claim 15, wherein any one of the configurations that exceeds its respective maximum allowed execution runtime is treated as illegal.

17. (Previously Presented) The method as recited in claim 7, wherein any one of the configurations that exceeds its respective maximum allowed execution runtime is treated as illegal.

18. (Canceled).

19. (New) The method as recited in claim 7, wherein the handling of the configurations as the single instructions is directly by an operating system.

20. (New) The method as recited in claim 7, wherein at least one of the configurations calls another of the configurations as a sub-routine.

21. (New) The method as recited in claim 15, wherein the watchdog signal initiates a system trap.

22. (New) The method as recited in claim 21, wherein the system trap is handled by an operating system as an illegal instruction.